

the *Macropodidæ*. In its long bones it approaches very closely to *Diprotodon*, possibly to *Nototherium* also. Its thigh-bone shows that it hardly departed from these in the structure and movements of its hind quarters. It is in short a transition form.

It is to be regretted that the rest of the bones, namely, two ribs, portions of two dorsal vertebræ, part of a pelvis and of a scapula and portions of a tibia and fibula, are too imperfect to afford material for comparative or descriptive notes. It may be convenient that the creature should have a name, and since its remains have carried us from the known to the unknown, the writer would suggest *Sthenomerus Charon*.



CONTRIBUTIONS TO THE ZOOLOGY OF NEW GUINEA, PART VII.

BY E. P. RAMSAY, F.L.S. (Curator of the Museum, Sydney.)

Since I last laid before the Society some notes on the avi-fauna of New Guinea, I have been fortunate enough to secure large and important collections of birds from the interior portion of the east end of the island, inland from Port Moresby, collected at the foot of, and on the slopes of Mount Astrolabe range. The first portion of these collections was obtained from Mr. Charles Hunstein, and is extremely interesting, showing that as we ascend the mountains to higher altitudes, we meet with species which were previously only known from Mount Afak, in the north-west island, such as *Grallinabrugni*, *Oreocharis*, *Diphylloides chrysoptera*, *Phlogænas rufigula*, and many others.

There were comparatively few new species in this portion of the collection, but it contained many that were not previously known from that portion of the island; nevertheless I obtained a new species of *Sericornis*, a genus which, as far as I know, had not been previously recorded from New Guinea. The *Grallina* also proved of interest, as one sex only of this species was previously known.

A beautiful pigeon, *Otidiphaps cervicalis*, was found to be plentiful on the slopes of the range, making a second species of this genus. It is very remarkable to observe how closely the avi-fauna of the whole of New Guinea resembles that of Australia. Bower-birds, cat-birds, paradise birds, pittas, hawks, owls, goat-suckers and podargi, ægotheles, swallows and swifts, parrots, fly-catchers, pigeons, a host of genera, and many species are common to both countries—while recently such genera as *Sericornis*, *Orthonyx*, *Climacteris*, *Sitella*, *Eurostopodus*, *Eöpsaltia*, *Drymodes*, *Grallina*, *Aprosmictus*, *Micræca*, and others supposed to be strictly Australian, have also been found there; the same may be said of the mammals, of which several genera, *e. g.*, *Hydromys*, *Dasyurus* and *Antechinus*, are common to both countries.

But to return to our recent acquisitions, I have received from Mr. Wilson of Mason Bros. collections containing over 1,000 skins collected by Messrs. Rolles and Hunstein, and other members of Mr. Goldie's party; I have also been permitted to examine a collection lately added to the extensive collection at Elizabeth Bay, and from these sources, I have drawn up the following list of species not recorded in my previous lists. I was much pleased to find *adult males* of the beautiful Paradise Bird, *Drepanornis d'Albertisi*; as least such we must call it until I can make a careful comparison with the type, although taking the description in detail, it does not altogether exactly agree with Dr. Sclater's description of D'Albertis's original specimens.

An interesting novelty occurs in a very distinct species of *Eurostopodus*. I believe this is the first occurrence of the genus on the island, for there seems to be considerable doubt as to *E. albogularis* (*viz.* Horsf.) ever having been obtained in the Papuan region, although we have recently described a specimen from the Solomon Islands. Another fine novelty is a handsome Paradise Bird, between *P. sanguinea* and *P. raggiana*. This new species, which comes from D'Entrecasteaux Island, I have named in honour of the amiable wife of the Hon. W. Macleay.

MAMMALS.—DENDROLAGUS DORIANUS, *sp., nov.*

General colour uniform dark brown all over, becoming black on the hands and feet, which are fringed with longer black hair; the palms of the hands and soles of the feet covered with depressed, flat, somewhat hexagonal tubercles, a very indistinct dorsal stripe, blackish; tail black, an irregular light rufous or fawn-coloured patch on the tail near the base, the hair of the tail comparatively short, close stiff and harsh to the touch, black or slightly interspersed with a few grisly hairs; hair of body dense, long, apparently of one kind only, erect between the shoulders; shorter on the neck, on the head very short, paler than on the body, and inclined to be woolly; muffle blackish, covered with short depressed whiskers, short, weak, black hairs, margin of nostrils only naked. Ears very short; densely covered at the base, inside and out, with woolly hair like that of the head, of a dark brown, becoming blackish on the tips and margin.

In a female the hair of the tail is very long, mixed with long reddish-brown hairs, and forming a tuft produced beyond the tips. In both adults and young, the fawn-coloured patch on the tail is chestnut. The whole of the hair on the body is reversed, and meeting that of the head, which is directed backwards, forms a ridge between the ears and down the sides of the cheeks, and is similarly directed on the limbs, the hair on the legs and arms being directed forwards as is usual. The limbs are heavy and very strong, the arms rather long, the legs short and stout.

Total length to the root of the tail, 2 feet, 5·5 inches; the tail 24 inches, wrist and hand 2·5 inches, mid finger 1·3 inch, its nail 1·2 inch, along the curve 1·5 inch; forearm, ulna 4·6 inches, radius 5·5 inches, humerus 4·6 inches, scapula to tip of the acromion process, 3·7 inches; tibia (measured outside the skin), 5 inches; foot (measured outside), 4·2 inches. Length of the skull, 5·2 inches; of the zygomatic arch, outside, 2·7 inches, inside 2 inches; across the skull in front, 1·1 inch, base of skull 1·8 inch.*

* The teeth and all the bones of the skull are in a very bad state, being corroded by the liquid in which the skin was preserved; few of the bones can be measured accurately.

Teeth, I. $\frac{3-3}{1-1}$, C. $\frac{1-1}{0-0}$, Pre M. $\frac{2-2}{2-2}$, M. $\frac{3-3}{3-3}$.

Distance from the outer margin of the first incisor to the hinder margin of the third molar, 3 inches; from same point to the first pre-molar, 1.4 inch; from same to centre of canine 0.7 inch; extent of the three incisors, 0.55; width of the palate between the pre-molars, 0.9; between the first molars, 0.95 inch; between the third molars, 0.95 inch; extent of the whole series, 1.6 inch. *Mandible*, extent of the whole pre-molar and molar series, 1.6 inch; first (permanent) pre-molar, 0.4; total length of the mandible from the base of the incisor tooth to condyle, 3.4 inches.

Three specimens of this fine species were brought by the natives to Mr. Goldie during his last collecting trip to the ranges behind Mt. Astrolabe.

I have named this species in honor of the Marquis of Doria, from whose papers, with those of Dr. Peters, I have gained valuable information on Papuan Zoology.

Hapalotis Papuanus, *sp. nov.* Pl. 11.

Length from tip of snout to root of tail 12 inches, the tail 9.9 inches, fore foot and toes 1.1 inches, hind foot and toes, 2.3 inches, the head 2.7 inches, the ear 1 inch, from snout to eye 1.4 inch, from snout to ear 2.5 inches (measurements taken from dry skin). There are three large tubercles at the base of the fingers, one at the base of the thumb and one opposite it at the root of the little finger (*See plate 11, fig. 1*), on the soles of the hind feet there are seven tubercles, arranged as shown in *fig. 3*.

The tail is bare, scaly, covered with four-sided irregular-shaped scales (*See fig. 5*).

Head—distance between the anterior margin of incisor and occipital condyles, 2.75 inches; breadth across basal portion of zygomatic arches, 1.2 inch. Extent of molar series, 0.49 inch; the fore and aft extent of first molar, 0.21 inch, of the second 0.16 inch, of the third 0.1 inch; width of palate between the first molars, 0.4 inch.

Lower Jaw—Length of the rami, 1·18 inch ; from base of lower incisor to the first molar, 0·5 inch ; extent of molar series, 0·49 inch ; from third molar to condyle, 0·75 inch ; first molar, 0·2 inch ; second molar, 0·15 inch ; third molar, 0·1 inch.

The fur is blackish down the back, mixed with a few reddish-brown hairs, brown on the sides and white on the belly and on the inner side of the limbs ; feet and hands light brown, sparingly covered with very short hairs ; whiskers very long and black, 4·5. There is also a slight rufescent tinge on the rump and thighs.

BIRDS.

Pœcilodryas Sylvia, sp. nov.

Sexes alike in plumage ; general color black, the upper and under tail-coverts, the abdomen and an oblong or semi-lunar shaped patch on either side of the chest white. The first primary and the inner webs of the wing-feathers blackish brown, under wing-coverts at the base of the primaries whitish ; bristles, bill, legs, and feet, black. The bill is strong, the white patch on the sides of the chest silky. Length, 4·8 to 5 inches ; wing, 3·5 ; tail, 2·1 in. ; tarsus, 0·82 ; bill from forehead, 0·65 ; from gape, 0·7 ; height at nostrils, 0·2 ; breadth at nostrils, 0·2. Mount Astrolabe.

Myzomela Eques, var.

Adult male.—The whole of the plumage, except the throat and chin, dull dark brown, slightly lighter on the under wing-coverts ; chin and throat rich bright glossy crimson, bill and legs blackish brown.

The female like the male, but slightly lighter in color and with no crimson on the chin or throat. Length of skin, 5·2 inches ; wing, 3·1 in. ; tail, 2·65 in. ; tarsus, 0·75 ; bill from the forehead, 0·9, from gape, 0·9.

This species answers to the description of the male of *M. eques*, but the specimen said to be a female has no red on the throat, nor does this female specimen agree with the young of *M. eques* ; it is on the whole a larger bird.

Erythura trichroa, var ?

All the upper and under surface grass-green, slightly paler on the under surface, the forehead and sides of the face extending over the ear-coverts blue ; wings blackish brown, outer webs above of the quills margined with green, the inner webs below dull buff ; underwing-coverts buff ; thighs buff ; tail blackish brown ; the centre two feathers and the outer webs of the remainder, except the outermost two, are margined with dull red ; upper tail-coverts dull red ; under tail-coverts green ; bill black ; legs dull brown. Length, 4 to 5 inches ; wing, 2·5 ; tail, 1·9 ; tarsus, 0·7 ; bill, 0·5 ; gape, 0·53.

This species is closely allied to if not identical with *E. trichroa*, Kittl, but my specimens differ from Mr. Wallace's description of *E. modesta* in not having any yellow on the sides of the neck.

Eurostopodus Astrolabæ, nov. sp.

Head and neck dark brown, the feathers centred by a lanceolate stripe of black and freckled with ashy ; those on the hind neck margined or tipped here and there with rufous ; small feathers in front of the eye above and below, and on the throat and the ear-coverts black strongly tipped with rufous ; a black streak below the eye, scapulars and adjacent feathers of the interscapular region rich light rufous, heavily blotched exteriorly with black, the rufous portions freckled with narrow zigzag and wavy lines of black ; the larger series of the scapulars blackish with ill-defined rufous cross-bands, the adjacent secondaries blackish-brown, banded only on the inner webs with rufous, the bands reduced to spots and finally lost on the three first secondaries ; primaries blackish brown, the median ones only with one to two rufous dots on the margin of the outer web ; no trace of the white blotch usually found on the wings of other species known. The upper wing-coverts blackish brown tipped with rufous and white ; the back, rump and upper tail-coverts dark brown, marked with ashy and pale rufous, and indistinctly barred with black lateral expansions of the central black line ; tail blackish brown, barred strongly on the inner webs and spotted on the outer, with rufous irregular markings ; the

central two feathers tipped and barred obliquely with black, the interspaces freckled with ashy rufous; the under surface of the tail black, the bars showing conspicuously (the two outermost on either side lost); under tail-coverts black barred with light rufous or deep buff; flanks, belly and breast strongly spotted at the tip of each feather, and barred with light rufous or deep buff, forming scale-like markings; feathers of the chest blackish, alternately barred with irregular wavy lines of rufous and black; throat patch white, the lateral feathers tipped with rufous; under wing-coverts blackish brown, spotted, tipped or barred with rufous, Legs reddish brown; bill black at the tip, brown at base and sides.

Total length about 9·5 in.; wing, 7·6 in.; tail, 5·5 in.; tarsus, 0·55 in.; mid toe, 0·7 in.; bill, from forehead, 0·7 in.; from nostril, 0·3 in.; from gape, 1·1 in.

The chief characteristics of this species are the rufous markings of the throat and chest, the scale-like markings on the abdomen and flanks, and the absence of the usually found large white or rufous spots on the primaries, and the rufous collar. Two specimens only from Astrolabe Range. (*Hunstein & Rolls*).

Aegotheles? plumifera, sp. nov.

This bird differs from *Aegotheles Bennettii* in having the face, throat, chest, and flanks washed with rufous brown, barred distinctly with black, an ashy spot at the angle of the mouth; the head is also washed with rufous, the collar ashy white freckled and barred with black; the tail with from 12 to 14 narrow broken bars. Length, 7 in.; wing, 4·5; tail, 4·2 in.; tarsus, 0·8; bill from gape, 1 in. The cheek plumes much elongated, the tips of the feathers decomposed and lengthened; bristles, black, long from 1 in. to 1·5 in. in length.

Paradisea Susannæ, sp. nov.

Bill lead-blue margined and tipped with yellowish white; a narrow band across the forehead bordering the anterior margin of the eye, the whole of the chin and the throat rich metallic green; feathers on the forehead and chin erect and velvety black in

certain lights, but with a slight purplish tinge in others; the remainder of the head, neck, back, mantle, rump, upper tail-and-wing-coverts light glistening orange-yellow tinged with pale chrome-yellow on the head, lightest and brightest on the rump and upper tail-coverts. Tail and wings brown, the outer margins of the secondaries and of the greater series of the coverts washed with yellow like the back; shafts of the quills reddish brown; margins on the under surface and the greater series of the under coverts and adjacent feathers rich pinkish cinnamon brown. The feathers of the chest pinkish cinnamon colour at the base, bluish ashy grey on the surface, abdomen and thighs; dull light grey tinged with pinkish cinnamon; plumes from above the flanks blood red with the ends of the feathers ashy white, a short tuft of anterior plumes of the same tint, but becoming black at the ends of the feathers over the base of the primary plumes and incurved, their points meeting on the abdomen and ending abruptly, not graduated towards the primary plumes. The two centre wire-like tail-feathers black, the webs at the tips brown, the webbed portion at the base metallic green; the green of the throat is separated from the chest by a narrow line of cinnamon buff; legs bluish lead colour with a pinkish tinge when alive. This species is very distinct from *Paradisea Raggiiana*, although the colour of the plumes is almost the same, but the tips of the feathers end in the same way as those of *P. sanguinea*. The velvet green chin-patch extends more than half way down the throat on *P. Raggiiana*. There are no anterior tufts of plumes. The under surface of these tufts are of a fiery red in certain lights.

There is no shoulder bar on the wings of this new species, all the coverts being tinged with yellow; it is a slightly smaller bird and the bill is weaker than in *P. Raggiiana*.

Adult Female.—The adult female resembles the young male. In the former the two centre tail-feathers do not reach the length of those on either side of them; wings and tail brown above and below, basal portion of the inner webs of the quills and the under wing-coverts cinnamon buff. All the under surface, except the throat, which is blackish, is of a cinnamon buff deeper in

tint on the flanks and abdomen, the whole surface barred with narrow cross lines of dark brown.

Head dull ochre yellow ; back and all the upper surface brown, washed with a duller shade of the same tint.

Young Male.—The young male, somewhat similar, the wire-like tail feathers subject to the same variations in progress towards maturity as those of *P. apoda* and others of this genus ; the bluish ashy grey of the chest shows at an early stage. This magnificent species was first met with by Mr. Rolles, who was fortunate in shooting a pair of fine adult males on the Island of D'Entrecasteaux.

Rhamphomantis rollesi, *sp. nov.*

General color.—Head and neck, a stripe from the angle of the mouth on the other side of the throat to below the ear-coverts black, with greenish metallic reflections ; a narrow white line from the nostrils to the base of the ear-coverts, throat and ear-coverts, rufous ; under surface of the wings and under wing-coverts pale cinnamon buff ; the remainder of the under surfaces of the body and the under tail-coverts light brown tinged with light cinnamon buff ; all the upper surface rich brown, glossy ; traces of rufous margins on the wing coverts and quills ; under the surface of the tail and anterior portions of the quills brown ; bill black ; legs lead blue.

Male.—Length, 7.5 ; wing, 4.2 ; tail, 4 in. ; tarsus, 0.75 ; bill from forehead 0.75 ; from gape, 0.83.

Female.—Rich glossy brown all over, strongly washed with rufous on the margin of the feathers ; all the feathers except the quills and tail barred indistinctly with ashy ; throat ashy white barred with blackish brown on the forehead, a narrow white stripe forming shaftlines from the nostrils to below the ear-coverts ; below the eye a narrow ashy white line ; there are a few ashy white freckles on the hind neck ; all the under surface of the body brown washed with rufous buff and having narrow cross lines of a brownish tint ; remains of blackish cross bars on some of the tail feathers ; under wing-coverts and webs of the quills pale cinnamon buff bill blackish brown ; legs lead-blue.

Female.—Length, 7·2 ; wing, 4 in. ; tail, 3·7 ; tarsus, 0·75 ; bill from forehead, 0·8 ; from angle of mouth, 0·85.

Only one pair of this species was obtained shot by Mr. Rolles on Mount Astrolabe.

MELANOCHARIS BICOLOR, *Ramsay, P.L.S., N.S.W., Vol. III, p. 277.*

There are several species of this bird in the collection, adult males and females. The whole of the under wing-coverts and axillaries pure silky-white as in the type.

Sitella albifrons, sp. nov.

All the head and chest silky-white, including the ear-coverts ; the upper tail-coverts white, most of them with a large lanceolate stripe of black down the centre ; tail blackish brown ; under tail-coverts blackish, broadly margined and tipped with white. Feathers of the rump adjacent to the upper tail-coverts white, the outer three feathers of the tail largely tipped with white, the fourth and fifth very slightly ; wings blackish brown, the first five of the primaries with a small spot of white on the margin of the inner webs, which forms a spot of white on the under surface of the wing, indistinct in some specimens, more distinct in others. Small spot of white on the under wing-coverts at the base of the primaries ; the lower part of the chest and the remainder surface of the body silky-white, with a broad streak of blackish brown down the centre of each feather ; back and rump dark brown, the feather centred with a blackish brown stripe ; bill yellow at the base, black at the tip, under wing-coverts blackish brown ; legs and feet yellow. Young birds are much browner and the white portions washed with ashy.

Total length about...	...	4·2
Wing	3·4
Tail	1·65
Tarsus	·6
Bill from forehead	·5

Hab.—Table-lands of Mount Astrolabe, about 3000 feet above the sea level ; met with in flocks among the Eucalyptus trees ; distance from the coast 15 miles. Inland high. (*Rolles.*)

Ælurædus melanocephalus, sp. nov.

I have compared a large number of *Ælurædus* from Mount Astrolabe Range, with both *Æ. arfacki* and *Æ. melanotus*, and find that it differs from the first in having the whole of the head, nape, and mantle spotted; from the second, *Æ. Melanotus*, in having a jet black head with small round fulvous spots in the centre of the feathers; lores and ear-coverts black; there are only indications of spots on the wing coverts and tips of secondaries; the whole of the under surface is washed with yellowish ochre, the throat and chest only distinctly spotted. This bird is quite distinct from Mr. Gould's plates of the both above-mentioned species; the under surface of the tail feathers have a decided greenish blue tinge on the margins of the inner webs, the feathers all largely tipped with white.

On comparison with Mr. Gould's plates and Mr. Sharpe's description, (*Cat. of Bds., Vol. VI.*), I think sufficient distinction will be found to warrant this species being separated from all other known species. Total length 11·5, wing 6 in., tail 5 in., tarsus 1·6, bill 1·3, from gape 1·46.

Hab.—Mount Astrolabe, N.G. *Hunstein, A. Rolles.*

For the pleasure of describing these species I am indebted to the Hon. William Macleay, who purchased them with a collection of birds of Mr. Goldie.

Manucodia atra.

There are two specimens of eggs said to belong to this bird, in length 1·3 in. in breadth; the ground color is a light greenish grey crowded with dots and spots of brown or reddish brown, and dark slate grey.

In a second specimen the ground color is almost wholly obscured by freckles of dull rich brown. (*Mr. Macleay's Coll.*)

Pæcilodryas albifacies (Sharpe.)

A neat cup-shaped nest like that of all the genus; it is composed of wiry rootlets, pieces of dry palm leaves, &c. The margins are ornamented with green mosses; it is placed between upright forks of the branches; the inside is very deep, 1·6 in., the whole height

of the nest being 2·6 x 2·3 in. across. The eggs, two in number are of a greenish white, spangled all over with reddish dots and spots, but closer together on the thicker end. (*Mr. Macleay's Coll.*)

Eupetes (Circeloroma) Ajax.

Egg oval, rather short, length 1·2 in. x 0·95 in. of a light stone color heavily blotched, spotted, dotted with irregular shaped marks of black, blackish brown and slate grey, one specimen has a large blotch of slate grey on the top of the thicker end. (*Mr. Macleay's Coll.*)

Paradisea Raggiana.

The nest is a flat, open, and a rather scanty structure of wiry twigs and roots, it is placed and worked into a platform of vines stretched across a small fork; it is 6 in. across at the widest part, and the inside diameter 3·6 in., the height of the whole structure 3 inches. The egg oval, rather pointed, of a creamy tint, or light buff; there are a few spots on the thin end of a reddish brown; on the thick end the spots are closer together and mixed with dashes and long narrow tear-shaped markings, and longitudinal streaks from the thick end towards the thin, which vary in color from reddish brown to salmon brown, some with a yellowish tint and others of slate grey being obsolete; there are also a few dots and small spots of the same colors sprinkled over the surface of the shell. Length, 1·45 in.; short diameter, 0·95 in.

Rectus ferruginea.

The eggs are long ovals of a pinkish chocolate color, sparingly sprinkled with blackish and slate-blue spots and dots on the thinner end, but closer on the thicker end.—(*Mr. Macleay's Coll.*)

Talegallus pyrrhopygius.

White like the egg of *Talegallus lathamii*, finely grained, length 3·65 x 2·3.—(*Macleay Coll.*)

Goura d'Albertisi.

The eggs are white, long oval in shape; length 2·4 x 1·55 in.—(*Macleay Coll.*)

Casuarius (beccari ?)

Egg 5·3 inches by 3·3 in. The ground color is of a dull greenish brown ; the raised irregular surface of a rich deep bright green.—(*Macleay Coll.*)

The following species of birds' eggs were collected by Mr. Hunstein, and kindly forwarded to me by Mr. Wilson, of Mason Brothers :—

Microglossus aterrimus.

Taken from a hollow branch or the hollow bole of a large tree at about 25 feet from the ground. There was only one egg on the debris at the bottom of this hollow ; the bird seen to fly from the hole and shot proved to be the female. The tree was situated in the open forest country on the Astrolabe Range. The egg is white, pointed at the thin end, rounded at the thicker end.

Length, 2 inches ; diameter near the thicker end, 1·4 in.

Otidiphaps cervicalis.—*Ramsay.*

The nest was a depression in the débris of leaves, which accumulated in the angles formed by the "spurs" or buttresses of scrub trees. Egg only one, bird shot from nest as she flew off. Egg white ; almost a true oval, evenly rounded at both ends, glossy. Length, 1·92 x 1·25 in.

This is very like the egg of a *Podargus*.

Hab. Astrolabe Ranges.

Ptilopus bellus.—*Sclater.* "Bebora."

The nest is a very scanty platform of sticks through which the eggs can be seen ; it is placed on a horizontal bough about 6 to 10 feet from the ground ; none contained more than one egg. The eggs are very small for the size of the bird ; they are oval and of a dull white or light cream.

Length, 1·2 x 0·9 in. ; 1·1 x 0·86 in. ; length, 1·18 x 0·93 in.

Astrolabe Ranges.

Macropygia Doreya.—*Bpt.* "Cua or Kua."

Eggs vary from long ovals to swollen ovals ; dull white.

Length, 1·2 x 0·93 ; 1·23 x 0·87.

Collyriocinclu rufigaster.—*Gould*.

The eggs, two in number, like those of the same species from Cape York ; white, thickly sprinkled over the surface with dull slate-coloured and grey freckles, closer towards the thick end, where they form a zone or a crowded patch on the tip.

Scrubs on the Goldie River.

Ptilopus superbus.

Eggs—white, oval, length 1·2 x 0·88, 1·23 x 0·87, slightly swollen in the centre.

Ptilopus pulchellus.

White, oblong, oval, equally rounded at both ends, length 1·1 x 0·75.

Carpophaga poliura.—*Salvad*.

Oval, pointed at thin end, dull white ; length 1·26 x 0·86. Lalokie Scrubs.

Caprimulgus Macrourus.

Three eggs, two for a sitting; length A 1·15 x 0·86, B 1·15 x 0·86, from same bird. The 3rd, 1·06 x 0·89c, is a smaller egg, and found by itself, 1·06 x 0·8. All were placed on the ground.

They are of a light creamy, with obscure dull slate grey spots, and a zone of similar spots round the larger end (A). No. 9 B, has no zone., No. 9 C, the smallest, has the spots more evenly dispersed over the surface.

Drepanornis d' Albertisi.

The nest is a thin, rather flat structure, built between a horizontal bough in the fork of a thin branch ; it has a slight depression about 1 inch deep, a net-work of wire rootlets are stretched across the fork, and the nest proper built on them ; it is composed of wiry grasses of a light reddish brown color, the platform being of black wiry roots.

The egg is in length 1·37, by one inch in breadth ; it is of a light dull cream color, with a reddish tinge, spotted all over with oblong dashes of reddish brown and light purplish grey, closer on the thick end.

Mr. Hunstein informs me that he shot the female bird on the nest, and that there cannot be any possibility of a mistake as to its authenticity, which judging from the state the egg was in, I can quite believe.

ON SOME HABITS OF PELOPEUS LETUS AND A SPECIES OF
LARRADA.

BY H. RAWES WHITTELL, ESQ.

On the 2nd January, 1880, numbers of a species of hornet, *Pelopæus letus*, took possession of our fireplace for the purpose of constructing their nests. I began to observe their movements, confining my attention principally to one pair; this pair readily decided upon a site, and began to build by securing thereon a shapeless mass of mud about half a square inch in area, which they brought in small portions from the bank of the Darling River, which was close by.

One of them worked out a shallow circular space, similar in shape to a saucer, using its mandibles, tarsi of the first pair of legs, and antennæ in the operation. The loads of mud before deposited almost promiscuously, are now arranged by each one on the edge of this saucer-shaped cavity, pressed into proper shape and thickness, and finished off forthwith. As the cell grows, the upper portion is made to project considerably beyond the lower. This is convenient, owing to the position they assume; always getting beneath the cell, and invariably working from the upper to the lower portion.

The work progresses in this way without interruption until the cell is about half or two-thirds the required depth; when the owners begin to insert their own bodies occasionally evidently to see how the interior is for size. About this time also they begin to draw out the lower portion of the cell, to a more nearly equal distance with the upper, from the base; it is also further strengthened by mud being piled on the top, and at either side. When the hornet finds that the cell is equal, or nearly so, in depth